

Amendments to the Claims:

The following listing of the claims replaces all previous listings and versions of the claims in the application:

Listing of the Claims:

1. (currently amended) A semiconductor component suitable for limiting transient voltages on the supply lines of a system having at least three supply lines, one of the supply lines being a current sink, the semiconductor comprising:

at least three input means for connection to respective ones of the supply lines;  
and for each input means, a respective overvoltage-triggered semiconductor protection unit;

wherein:

a shielding diffusion is provided between adjacent protection units for blocking lateral current flow between said adjacent protection units, said shielding diffusion not extending around the whole periphery of each protection unit;

each protection unit comprises a multi-junction diode which has a threshold voltage at which it changes from a high-impedance state to a low-impedance state and a respective further diode connected in shunt with the multi-junction diode and in the opposite sense to the multi-junction diode;

each multi-junction diode is connected in the same sense between a respective input means and a common terminal;

and each protection unit is adapted to use a lateral turn on current.

2. (canceled)

3. (canceled)

4. (currently amended) A semiconductor component as claimed in claim 12 wherein said shielding diffusion extends at least partway into the semiconductor component.

5. (currently amended) A semiconductor component as claimed in claim 12 wherein said shielding diffusion extends the full depth of the semiconductor component.

6. (currently amended) A semiconductor component as claimed in claim 12 comprising a substrate having an upper surface and a lower surface wherein:

    said common terminal is formed on said lower surface;

    the input means of each said protection unit is formed on said upper surface;

    and said shielding diffusion extends at least partway into said substrate from at least one of said surfaces.

7. (currently amended) A semiconductor component as claimed in claim 12 wherein each of the further diodes has a single PN junction.

8. (canceled)

9. (canceled)

10. (new) A semiconductor component suitable for limiting transient voltages on the supply lines of a system having at least three supply lines, one of the supply lines being a current sink, the semiconductor comprising:

    at least three input means for connection to respective ones of the supply lines;

    and for each input means, a respective overvoltage-triggered semiconductor protection unit;

wherein:

each protection unit comprises a multi-junction diode which has a threshold voltage at which it changes from a high-impedance state to a low-impedance state and a respective further diode connected in shunt with the multi-junction diode and in the opposite sense to the multi-junction diode, at least one, but not all, of the further diodes being a multi-junction diode and each of the other further diodes having a single PN junction;

each multi-junction diode is connected in the same sense between a respective input means and a common terminal;

and each protection unit is adapted to use a lateral turn on current.

11. (new) A semiconductor component suitable for limiting transient voltages on the supply lines of a system having at least three supply lines, one of the supply lines being a current sink, the semiconductor comprising:

at least three input means for connection to respective ones of the supply lines;

and for each input means, a respective overvoltage-triggered semiconductor protection unit;

wherein:

each protection unit comprises a multi-junction diode which has a threshold voltage at which it changes from a high-impedance state to a low-impedance state and a respective further diode connected in shunt with the multi-junction diode and in the opposite sense to the multi-junction diode, each of the further diodes being a multi-junction diode;

each multi-junction diode is connected in the same sense between a respective input means and a common terminal;

and each protection unit is adapted to use a lateral turn on current.